



UDOT University College of Project Delivery Academic Business Plan

Vision:

UDOT University will become an outstanding educational system that is fully integrated into UDOT's culture, ensuring an exceptionally knowledgeable, diversely talented, and broadly experienced workforce.

The College of Project Delivery will educate and energize project teams to deliver world class projects.

Setting the stage:

Who we train:

All members of project teams including (but not limited to):

Project Managers
Program Managers
Project Management Techs
Preconstruction Engineers
Designers
Regional Environmental Staff
District Engineers
Resident Engineers
Public Involvement Managers
Central Project Managers / Functional Managers
Consultants

How we train:

Workshop/Classroom courses—NHI, University, etc.
Webinars
On-Line courses
Individual training

Strengths:

We provide beneficial specialized technical training to our individual groups.



**Weaknesses:**

With our focus on technical skills, there is a lack of general training in all areas ton team members so that everyone has at a least a basic understanding of requirements for disciplines other than their own.

Strategy:

In the Project Delivery College, we will continue to provide the excellent technical training in all individual disciplines and increase our efforts in the Project Management area in order to increase efficiency in project delivery.

Objectives:

Create a well-rounded, knowledgeable workforce.

- Provide specialized technical training in each of the core areas to achieve competency and expertise.
- Provide general overview training to all team members to enhance understanding of project requirements.

Provide training in ways that meet the needs of the student body.

- Utilize technology to create courses that can be completed without becoming a burden on the student's time.

Improve the quality of the training offered.

- Tailor training to UDOT specific process and standards.
- Consider training needs as new processes are being developed.

Resources:

Personnel—Utilize experienced internal staff to develop training content

Capital—Training Program funds, Partnerships with FHWA, AASHTO, etc., fees charged to external customers

Tools—training computers, available conference rooms, video conferencing, webinars

Benchmarks (scorecard):

Course Evaluations—surveys, tracking of online users for web based training

Student Evaluations—tests, certifications, completion rates

Appendices:

Course Listings and Descriptions





Course List

Consultant Services:

Contracting 101
CMS Consultant Documents
CMS Contract/ICE Request
CMS Overview
Contract Administration Overview
On-call Contracts Overview

Project Management:

PM Orientation
Leadership
Risk Management
Professional PM Skills—PMI
Project Quality Management
Technical 101 Courses
Contract Management

- *Concepts and principles of contract law (terms and conditions, contract provisions, etc.)*
- *Contracting Methods and Types (professional services (Brooks Act), purchase agreements vs. contracts, RFP's, RFQ's, categories (DBB, DB, CMGC, fixed-fee, lump sum, etc.)*
- *Independent Cost Estimating*
- *Contract Ethics*
- *Contract Negotiations*
- *Contract Administration (key policies, progress and performance, pay requests, documentation, dispute resolution, contract termination, etc.)*
- *Business Tools and Techniques (CMS, Consultant Services MOI, Closeout Network, and templates)*

Preconstruction:

Microstation (through Bentley on Demand)
InRoads (through Bentley on Demand)
ProjectWise (through Bentley on Demand)
Other Bentley products (through Bentley on Demand)
Roadside Design Guide
Project Design Criteria



Design Exceptions/Waivers

Practical Design

Cost Based Estimating

2011 Design Network

QC/QA procedure

Standards process (this will be a different attendee group aimed at the owners of each

Standard Spec or Drawing)

Plan Set Review

Advertising Checklist items

Innovative Contracting Methods

Construction:

CEMT – Construction Engineering Management Training

IQP – Inspectors Qualification Program

Partnering

IQP – Level 2, Level 3 & Level 4

Partnering – Phase 3

Structures:

NHI Safety Inspection of In-Service Bridges (Full 2-Week)

NHI Safety Inspection of In-Service Bridges (3 Day Refresher)

Aspen Aerials Under Bridge Crane Training

Rope Works - Crane Evacuation Training

Ultrasonic Level I

Fall Protection Training

Confined Space Training

UPRR/UTA Training

AASHTO LRFD Bridge Design

AASHTO Seismic

NBI Inspection Course

Bridge Operations Overview

Bridge Design Overview

Constructing structures (flip charts and posterboard)

Geotech:

Technical Geotech Training (NHI Course or Other)

Geotechnical Program Overview

Technical Geotech Training (NHI Course or Other)

Deep Foundation & MSE Walls Inspection Courses





Materials:

MEPDG Pavement Design

General Materials Training

TTQP

Database/ UDOT and Consultant Field and Lab Technicians

LTPP Structural Steel and Welding Inspection

Precast Concrete Industry group training and coordination

CEMT

Expand Materials Training for Trans Techs at Region Level

Expand Training on documentation processes

Hydraulics:

Scour POAs and Coding of Item 113

Scour Elements for Bridge Inspectors

Culvert Installation Methods and Requirements for Inspectors

Storm Drainage Design in MicroStation

Session 1 – Hydrology—Utah Emphasis

Session 2 – Culvert Design and Analysis

Session 3 – Outlet Scour Analysis and Design—HEC 14

Session 4 – Fish Friendly Culvert Design and Analysis

Session 5 – Riprap—Notes for Designers and Inspectors

Aging Culverts Problems and Repairs

Environmental:

Environmental Control Supervisor (ECS) Training

Construction Engineering Management Training (CEMT) – Environmental Issues

Transportation Education Program (TEP) - Environmental Issues

- Transportation Technician Academy
- TEP Short Courses – Web based

Inspector Qualification Program (IQP) - Environmental Issues

National Highway Institute (NHI): Basic NEPA

National Highway Institute (NHI): Advanced NEPA

UDOT Environmental Process

UDOT Mitigation Database in ePM

UDOT/FHWA Memorandum of Understanding on Categorical Exclusion Approval Authority





Right-of-Way:

NHI Courses

IRWA Courses

Utilities and Railroads:

Utility Program Overview

Railroad Program Overview

Utility and Railroad Coordination, Specifications, Special Provisions

Betterment Agreements

Utility Company Specifications

Railroad Flagging and Other Protective Services

Local Government Project Utility Coordination

At-Grade Crossing Safety Projects

